



## **2018 Toxic Substances Accounting Report**

Espanola Mill

Prepared under the Toxics Reduction Act & O. Reg. 455/09

# Environmental Policy

We will conduct business in a manner that conserves resources and minimizes our environmental footprint. We seek continual improvement in our environmental performance by setting, reviewing and updating environmental goals.

Our employees share in this responsibility and are accountable for the successful implementation of this policy. Local management is empowered to curtail operations, as necessary, to prevent serious environmental impacts.

**We are committed to:**

- Managing operations to comply with all applicable laws and regulations and other requirements to which we subscribe, with emphasis on pollution prevention, and minimizing adverse environmental impacts;
- Identifying and evaluating potential environmental risks and implementing appropriate measures to eliminate or control those risks;
- Developing and implementing measures to ensure sustainable use of materials, resources and energy;
- Promoting and developing awareness, leadership and accountability with respect to environmental protection among all our employees and persons working for us or on our behalf;
- Communicating with our employees, customers, suppliers, the communities in which we operate and public officials to build greater mutual understanding of environmental issues;
- Participating in the development of governmental environment policies based on sound science and sustainability principles;
- Supporting research aimed at improving process efficiency and environmental protection measures and applying such knowledge to our product stewardship;
- Conducting independent environmental audits to confirm that our management practices meet policy objectives, legislation and the principles of sound management;
- Reporting to the Board of Directors on the environmental risks, opportunities, and status of our operations.

June 2021



## 2018 TOXIC SUBSTANCES ACCOUNTING REPORT

Under Section 9 of the Toxics Reduction Act, an owner and operator of a facility are required to ensure for each process at the facility that uses or creates a prescribed toxic substance, that the substance is tracked and quantified, in accordance with the regulations. Under Section 10 (4) of the Act, the owner and the operator of a facility who are required under this section to ensure that a report is prepared shall ensure that all or part of the report, or some or all of the information contained in the report, is made available to the public on the Internet and by other means in accordance with the regulations.

The information contained within this report is the result of the accounting activities outlined in both the Act and Regulation. This report satisfies the requirements for reporting to the public as outlined in both the Act and Regulation.

Substance:  
CAS Number:

Acetaldehyde
75-07-0

On a facility-wide basis:

Amount that entered the facility as the substance itself or as a constituent of another substance:

Metric Tonnes

>0 - 1

The amount of substance that was created:

>10 - 100

The amount of substance that was contained in product:

>0 - 1

\*On-site releases from the facility to air, water and land, as well as on and off-site disposal and off-site recycling for any of the above substances can be viewed by searching for this facility at <http://www.ec.gc.ca/inrp-npri/default.asp?lang=en>.

### Was a Toxic Substance Reduction Plan prepared for this substance during the reporting period?

A toxic substance reduction plan was prepared for this substance for the 2011 reporting period.

#### Toxic Substance Reduction Plan Objective

Domtar Inc. – Espanola Mill does not intend to reduce its use or creation of Acetaldehyde as it is an undesirable trace contaminant created within the manufacturing process for which there is no viable process alternative. Based on the information gathered in this report, the amount of Acetaldehyde created is not expected to change. Domtar Inc. – Espanola Mill is committed to developing and implementing measures to ensure sustainable use of materials, resources and energy.

#### Implemented Options

No options were identified to be technically or economically feasible. Therefore, no option was implemented for the reduction of this substance.

Substance:  
CAS Number:

Ammonia (total)
NA - 16

On a facility-wide basis:

Amount that entered the facility as the substance itself or as a constituent of another substance:

Metric Tonnes

>0 - 1

The amount of substance that was created:

>100 - 1000

The amount of substance that was contained in product:

>0 - 1

\*On-site releases from the facility to air, water and land, as well as on and off-site disposal and off-site recycling for any of the above substances can be viewed by searching for this facility at <http://www.ec.gc.ca/inrp-npri/default.asp?lang=en>.

### Was a Toxic Substance Reduction Plan prepared for this substance during the reporting period?

A toxic substance reduction plan was prepared for this substance for the 2012 reporting period.

#### Toxic Substance Reduction Plan Objective

Domtar Inc. – Espanola Mill does not intend to reduce its creation of Ammonia because it is an undesirable trace contaminant created as a by-product within the pulping, chemical recovery, and wastewater treatment processes for which there is no viable alternative. Domtar Inc. – Espanola Mill is committed to developing and implementing measures to ensure sustainable use of materials, resources and energy.

#### Implemented Options

No options were identified to be technically or economically feasible. Therefore, no option was implemented for the reduction of this substance.

Substance:	Chlorine
CAS Number:	7782-50-5

On a facility-wide basis:

Amount that entered the facility as the substance itself or as a constituent of another substance:

The amount of substance that was created:

The amount of substance that was contained in product:

Metric Tonnes

>0 - 1
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>1 - 10
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>0 - 1
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\*On-site releases from the facility to air, water and land, as well as on and off-site disposal and off-site recycling for any of the above substances can be viewed by searching for this facility at <http://www.ec.gc.ca/inrp-npri/default.asp?lang=en>.

**Was a Toxic Substance Reduction Plan prepared for this substance during the reporting period?**

A toxic substance reduction plan was prepared for this substance for the 2012 reporting period.

**Toxic Substance Reduction Plan Objective**

Domtar Inc. – Espanola Mill does not intend to reduce its creation of Chlorine Dioxide because it is a required bleaching agent in the pulp making process for which there is no viable alternative. Domtar Inc. – Espanola Mill is committed to developing and implementing measures to ensure sustainable use of materials, resources and energy.

**Implemented Options**

No options were identified to be technically or economically feasible. Therefore, no option was implemented for the reduction of this substance.

Substance:	Chlorine Dioxide
CAS Number:	10049-04-4

On a facility-wide basis:

Amount that entered the facility as the substance itself or as a constituent of another substance:

The amount of substance that was created:

The amount of substance that was contained in product:

Metric Tonnes

>0 - 1
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>1000 - 10000
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>0 - 1
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\*On-site releases from the facility to air, water and land, as well as on and off-site disposal and off-site recycling for any of the above substances can be viewed by searching for this facility at <http://www.ec.gc.ca/inrp-npri/default.asp?lang=en>.

**Was a Toxic Substance Reduction Plan prepared for this substance during the reporting period?**

A toxic substance reduction plan was prepared for this substance for the 2012 reporting period.

**Toxic Substance Reduction Plan Objective**

Domtar Inc. – Espanola Mill does not intend to reduce its creation of Chlorine Dioxide because it is a required bleaching agent in the pulp making process for which there is no viable alternative. Domtar Inc. – Espanola Mill is committed to developing and implementing measures to ensure sustainable use of materials, resources and energy.

**Implemented Options**

No options were identified to be technically or economically feasible. Therefore, no option was implemented for the reduction of this substance.

Substance:	Formaldehyde
CAS Number:	50-00-0

On a facility-wide basis:

Amount that entered the facility as the substance itself or as a constituent of another substance:

Metric Tonnes

>0 - 1
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>10 - 100
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>0 - 1
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The amount of substance that was created:

The amount of substance that was contained in product:

\*On-site releases from the facility to air, water and land, as well as on and off-site disposal and off-site recycling for any of the above substances can be viewed by searching for this facility at <http://www.ec.gc.ca/inrp-npri/default.asp?lang=en>.

#### **Was a Toxic Substance Reduction Plan prepared for this substance during the reporting period?**

A toxic substance reduction plan was prepared for this substance for the 2012 reporting period.

#### **Toxic Substance Reduction Plan Objective**

The Domtar Incorporated – Espanola Mill is committed to developing and implementing measures to ensure sustainable use of materials, resources and energy. Domtar Incorporated – Espanola Mill intends to reduce its creation of Formaldehyde. Based on the information gathered in this report, the amount of Formaldehyde created is not expected to significantly increase.

#### **Implemented Options**

Domtar installed in 2016 a CO monitor on its Bark Boiler. This additional monitor will allow for improved boiler control which could improve emissions.

Substance:	Hydrochloric acid
CAS Number:	7647-01-0

On a facility-wide basis:

Amount that entered the facility as the substance itself or as a constituent of another substance:

Metric Tonnes

>1 - 10
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>10 - 100
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>0 - 1
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The amount of substance that was created:

The amount of substance that was contained in product:

\*On-site releases from the facility to air, water and land, as well as on and off-site disposal and off-site recycling for any of the above substances can be viewed by searching for this facility at <http://www.ec.gc.ca/inrp-npri/default.asp?lang=en>.

#### **Was a Toxic Substance Reduction Plan prepared for this substance during the reporting period?**

A toxic substance reduction plan was prepared for this substance for the 2011 reporting period.

#### **Toxic Substance Reduction Plan Objective**

Domtar Inc. – Espanola Mill does not intend to reduce its use or creation of Hydrochloric Acid as no viable alternative could be identified. Based on the information gathered in this report, the amount of Hydrochloric Acid used and created is not expected to significantly increase. Domtar Inc. – Espanola Mill is committed to developing and implementing measures to ensure sustainable use of materials, resources and energy.

#### **Implemented Options**

No options were identified to be technically or economically feasible. Therefore, no option was implemented for the reduction of this substance.

Substance:  
CAS Number:

Hydrogen sulphide  
7783-06-4

On a facility-wide basis:

Amount that entered the facility as the substance itself or as a constituent of another substance:

The amount of substance that was created:

The amount of substance that was contained in product:

Metric Tonnes

>0 - 1

>100 - 1000

>0 - 1

\*On-site releases from the facility to air, water and land, as well as on and off-site disposal and off-site recycling for any of the above substances can be viewed by searching for this facility at <http://www.ec.gc.ca/inrp-npri/default.asp?lang=en>.

**Was a Toxic Substance Reduction Plan prepared for this substance during the reporting period?**

A toxic substance reduction plan was prepared for this substance for the 2012 reporting period.

**Toxic Substance Reduction Plan Objective**

Domtar Inc. – Espanola Mill will be reducing its creation of Hydrogen Sulphide through the addition of six more aerators in the Wastewater Treatment Process. Domtar Inc. – Espanola Mill is committed to developing and implementing measures to ensure sustainable use of materials, resources and energy.

**Implemented Options**

Six additional aerators were installed in the effluent treatment system in 2014. This will improve oxygenation of the effluent, and reduce Hydrogen Sulphide formation. Liquor Sulphidity target has been lowered to 30%. This may reduce overall TRS and H<sub>2</sub>S formation in the

Substance:  
CAS Number:

Isopropyl Alcohol  
67-63-0

On a facility-wide basis:

Amount that entered the facility as the substance itself or as a constituent of another substance:

The amount of substance that was created:

The amount of substance that was contained in product:

Metric Tonnes

>0 - 1

>1 - 10

>0 - 1

\*On-site releases from the facility to air, water and land, as well as on and off-site disposal and off-site recycling for any of the above substances can be viewed by searching for this facility at <http://www.ec.gc.ca/inrp-npri/default.asp?lang=en>.

**Was a Toxic Substance Reduction Plan prepared for this substance during the reporting period?**

A toxic substance reduction plan was prepared for this substance for the 2012 reporting period.

**Toxic Substance Reduction Plan Objective**

The Domtar Incorporated – Espanola Mill is committed to developing and implementing measures to ensure sustainable use of materials, resources and energy. Domtar Incorporated – Espanola Mill intends to reduce its creation of Isopropyl Alcohol. Based on the information gathered in this report, the amount of Isopropyl alcohol created is not expected to significantly increase.

**Implemented Options**

Domtar installed in 2016 a CO monitor on its Bark Boiler. This additional monitor will allow for improved boiler control which could improve emissions.

Substance:	Manganese (and its compounds)
CAS Number:	NA - 09

On a facility-wide basis:

Amount that entered the facility as the substance itself or as a constituent of another substance:

Metric Tonnes

>10 - 100
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>0 - 1
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>10 - 100
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The amount of substance that was created:

The amount of substance that was contained in product:

\*On-site releases from the facility to air, water and land, as well as on and off-site disposal and off-site recycling for any of the above substances can be viewed by searching for this facility at <http://www.ec.gc.ca/inrp-npri/default.asp?lang=en>.

#### **Was a Toxic Substance Reduction Plan prepared for this substance during the reporting period?**

A toxic substance reduction plan was prepared for this substance for the 2011 reporting period.

#### **Toxic Substance Reduction Plan Objective**

Domtar Inc. – Espanola Mill does not intend to reduce its use of this metal (and its compounds) because it is an undesirable trace contaminant in raw materials (wood chips, natural gas and chemicals) for which there is no viable alternative. Based on the information gathered in this report, the amount of this metal (and its compounds) used is not expected to significantly increase. Domtar Inc. – Espanola Mill is committed to developing and implementing measures to ensure sustainable use of materials, resources and energy.

#### **Implemented Options**

No options were identified to be technically or economically feasible. Therefore, no option was implemented for the reduction of this substance.

Substance:	Methanol
CAS Number:	67-56-1

On a facility-wide basis:

Amount that entered the facility as the substance itself or as a constituent of another substance:

Metric Tonnes

>1000 - 10000
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>1000 - 10000
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>0 - 1
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The amount of substance that was created:

The amount of substance that was contained in product:

\*On-site releases from the facility to air, water and land, as well as on and off-site disposal and off-site recycling for any of the above substances can be viewed by searching for this facility at <http://www.ec.gc.ca/inrp-npri/default.asp?lang=en>.

#### **Was a Toxic Substance Reduction Plan prepared for this substance during the reporting period?**

A toxic substance reduction plan was prepared for this substance for the 2011 reporting period.

#### **Toxic Substance Reduction Plan Objective**

Domtar Inc. – Espanola Mill does not intend to reduce its use or creation Methanol as no viable alternative could be identified. Based on the information gathered, the amount of Methanol used and created is not expected to significantly increase. Domtar Inc. – Espanola Mill is committed to developing and implementing measures to ensure sustainable use of materials, resources and energy.

#### **Implemented Options**

No options were identified to be technically or economically feasible. Therefore, no option was implemented for the reduction of this substance.

Substance:	Methyl Ethyl Ketone
CAS Number:	78-93-3

On a facility-wide basis:

Amount that entered the facility as the substance itself or as a constituent of another substance:

Metric Tonnes

>0 - 1
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The amount of substance that was created:

>10 - 100
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The amount of substance that was contained in product:

>0 - 1
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\*On-site releases from the facility to air, water and land, as well as on and off-site disposal and off-site recycling for any of the above substances can be viewed by searching for this facility at <http://www.ec.gc.ca/inrp-npri/default.asp?lang=en>.

**Was a Toxic Substance Reduction Plan prepared for this substance during the reporting period?**

A toxic substance reduction plan was prepared for this substance for the 2012 reporting period.

**Toxic Substance Reduction Plan Objective**

Domtar Incorporated – Espanola Mill is committed to developing and implementing measures to ensure sustainable use of materials, resources and energy. Domtar Incorporated – Espanola Mill intends to reduce its creation of Methyl Ethyl Ketone. Based on the information gathered in this report, the amount of Methyl Ethyl Ketone created is not expected to significantly increase. Incorporated

**Implemented Options**

Domtar installed in 2016 a CO monitor on its Bark Boiler. This additional monitor will allow for improved boiler control which could improve emissions.

Substance:	Methyl Isobutyl Ketone
CAS Number:	108-10-1

On a facility-wide basis:

Amount that entered the facility as the substance itself or as a constituent of another substance:

Metric Tonnes

>0 - 1
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The amount of substance that was created:

>1 - 10
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The amount of substance that was contained in product:

>0 - 1
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\*On-site releases from the facility to air, water and land, as well as on and off-site disposal and off-site recycling for any of the above substances can be viewed by searching for this facility at <http://www.ec.gc.ca/inrp-npri/default.asp?lang=en>.

**Was a Toxic Substance Reduction Plan prepared for this substance during the reporting period?**

A toxic substance reduction plan was prepared for this substance for the 2012 reporting period.

**Toxic Substance Reduction Plan Objective**

The Domtar Incorporated – Espanola Mill is committed to developing and implementing measures to ensure sustainable use of materials, resources and energy. Domtar Incorporated – Espanola Mill intends to reduce its creation of Methyl Isobutyl Ketone. Based on the information gathered in this report, the amount of Methyl Isobutyl Ketone created is not expected to significantly increase.

**Implemented Options**

Domtar installed in 2016 a CO monitor on its Bark Boiler. This additional monitor will allow for improved boiler control which could improve emissions.

Substance:  
CAS Number:

Nitrate Ion
NA - 17

On a facility-wide basis:

Amount that entered the facility as the substance itself or as a constituent of another substance:

The amount of substance that was created:

The amount of substance that was contained in product:

Metric Tonnes
>10 - 100
>0 - 1
>0 - 1

\*On-site releases from the facility to air, water and land, as well as on and off-site disposal and off-site recycling for any of the above substances can be viewed by searching for this facility at <http://www.ec.gc.ca/inrp-npri/default.asp?lang=en>.

**Was a Toxic Substance Reduction Plan prepared for this substance during the reporting period?**

A toxic substance reduction plan was prepared for this substance for the 2012 reporting period.

**Toxic Substance Reduction Plan Objective**

Domtar Inc. – Espanola Mill does not intend to reduce its use of Nitrate Ion because it is a desirable substance within the Wastewater Treatment process and no viable alternative was identified. Nitrate Ion is created within the Wastewater Treatment process as a natural by-product of the Nitrogen cycle for which there is no viable alternative. Domtar Inc. – Espanola Mill is committed to developing and implementing measures to ensure sustainable use of materials, resources and energy.

**Implemented Options**

No options were identified to be technically or economically feasible. Therefore, no option was implemented for the reduction of this substance.

Substance:  
CAS Number:

Phosphorus (total)
NA - 22

On a facility-wide basis:

Amount that entered the facility as the substance itself or as a constituent of another substance:

The amount of substance that was created:

The amount of substance that was contained in product:

Metric Tonnes
>100 - 1000
>0 - 1
>0 - 1

\*On-site releases from the facility to air, water and land, as well as on and off-site disposal and off-site recycling for any of the above substances can be viewed by searching for this facility at <http://www.ec.gc.ca/inrp-npri/default.asp?lang=en>.

**Was a Toxic Substance Reduction Plan prepared for this substance during the reporting period?**

A toxic substance reduction plan was prepared for this substance for the 2012 reporting period.

**Toxic Substance Reduction Plan Objective**

The Domtar Inc. – Espanola Mill is committed to developing and implementing measures to ensure sustainable use of materials, resources and energy. The Mill does not intend to reduce its use of Phosphorous because it is an undesirable trace contaminant in raw materials (wood chips, bark, and chemicals) for which there is no viable alternative and used within the Wastewater Treatment process to promote wastewater treatment for which there is no viable alternative. Based on the information gathered in this report, the amount of Phosphorous in the feedstock is not expected to significantly increase. Phosphorous used at the wastewater treatment plant is expected to increase as a result of studies indicating a phosphorous deficiency.

**Implemented Options**

No options were identified to be technically or economically feasible. Therefore, no option was implemented for the reduction of this substance.

Substance:	Sulphuric acid
CAS Number:	7664-93-9

On a facility-wide basis:

Amount that entered the facility as the substance itself or as a constituent of another substance:

The amount of substance that was created:

The amount of substance that was contained in product:

Metric Tonnes

>10000 - 100000
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>1 - 10
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>0 - 1
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\*On-site releases from the facility to air, water and land, as well as on and off-site disposal and off-site recycling for any of the above substances can be viewed by searching for this facility at <http://www.ec.gc.ca/inrp-npri/default.asp?lang=en>.

#### **Was a Toxic Substance Reduction Plan prepared for this substance during the reporting period?**

A toxic substance reduction plan was prepared for this substance for the 2011 reporting period.

#### **Toxic Substance Reduction Plan Objective**

Domtar Inc. – Espanola Mill does not intend to reduce its use or creation of Sulphuric Acid as no viable alternative could be identified. Based on the information gathered, the amount of Sulphuric Acid used and created is not expected to significantly increase. Domtar Inc. – Espanola Mill is committed to developing and implementing measures to ensure sustainable use of materials, resources and energy.

#### **Implemented Options**

No options were identified to be technically or economically feasible. Therefore, no option was implemented for the reduction of this substance.

Substance:	Total Reduced Sulphur
CAS Number:	NA - M14

On a facility-wide basis:

Amount that entered the facility as the substance itself or as a constituent of another substance:

The amount of substance that was created:

The amount of substance that was contained in product:

Metric Tonnes

>0 - 1
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>1000 - 10000
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>0 - 1
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\*On-site releases from the facility to air, water and land, as well as on and off-site disposal and off-site recycling for any of the above substances can be viewed by searching for this facility at <http://www.ec.gc.ca/inrp-npri/default.asp?lang=en>.

#### **Was a Toxic Substance Reduction Plan prepared for this substance during the reporting period?**

A toxic substance reduction plan was prepared for this substance for the 2012 reporting period.

#### **Toxic Substance Reduction Plan Objective**

Domtar Inc. – Espanola Mill will be reducing its creation of Total Reduced Sulphur through the addition of six more aerators in the Wastewater Treatment Process. Domtar Inc. – Espanola Mill is committed to developing and implementing measures to ensure sustainable use of materials, resources and energy.

#### **Implemented Options**

Six additional aerators were installed in the effluent treatment system in 2014. This will improve oxygenation of the effluent, and reduce TRS (H<sub>2</sub>S specifically) formation. Liquor Sulphidity target has been lowered to 30%. This may reduce overall TRS and H<sub>2</sub>S formation in the Pulping, Chemical Recovery, and Wastewater Treatment processes.

Substance:  
CAS Number:

Arsenic (and its compounds)
NA - 02

On a facility-wide basis:

Amount that entered the facility as the substance itself or as a constituent of another substance:

The amount of substance that was created:

The amount of substance that was contained in product:

Kilograms

>100 - 1000
>0 - 1
>10 - 100

\*On-site releases from the facility to air, water and land, as well as on and off-site disposal and off-site recycling for any of the above substances can be viewed by searching for this facility at <http://www.ec.gc.ca/inrp-npri/default.asp?lang=en>.

**Was a Toxic Substance Reduction Plan prepared for this substance during the reporting period?**

A toxic substance reduction plan was prepared for this substance for the 2011 reporting period.

**Toxic Substance Reduction Plan Objective**

Domtar Inc. – Espanola Mill does not intend to reduce its use of this metal (and its compounds) because it is an undesirable trace contaminant in raw materials (wood chips, natural gas and chemicals) for which there is no viable alternative. Based on the information gathered in this report, the amount of this metal (and its compounds) used is not expected to significantly increase. Domtar Inc. – Espanola Mill is committed to developing and implementing measures to ensure sustainable use of materials, resources and energy.

**Implemented Options**

No options were identified to be technically or economically feasible. Therefore, no option was implemented for the reduction of this substance.

Substance:  
CAS Number:

Cadmium (and its compounds)
NA - 03

On a facility-wide basis:

Amount that entered the facility as the substance itself or as a constituent of another substance:

The amount of substance that was created:

The amount of substance that was contained in product:

Kilograms

>10 - 100
>0 - 1
>10 - 100

\*On-site releases from the facility to air, water and land, as well as on and off-site disposal and off-site recycling for any of the above substances can be viewed by searching for this facility at <http://www.ec.gc.ca/inrp-npri/default.asp?lang=en>.

**Was a Toxic Substance Reduction Plan prepared for this substance during the reporting period?**

A toxic substance reduction plan was prepared for this substance for the 2011 reporting period.

**Toxic Substance Reduction Plan Objective**

Domtar Inc. – Espanola Mill does not intend to reduce its use of this metal (and its compounds) because it is an undesirable trace contaminant in raw materials (wood chips, natural gas and chemicals) for which there is no viable alternative. Based on the information gathered in this report, the amount of this metal (and its compounds) used is not expected to significantly increase. Domtar Inc. – Espanola Mill is committed to developing and implementing measures to ensure sustainable use of materials, resources and energy.

**Implemented Options**

No options were identified to be technically or economically feasible. Therefore, no option was implemented for the reduction of this substance.

Substance:	Cobalt (and its compounds)
CAS Number:	NA - 05

On a facility-wide basis:

Amount that entered the facility as the substance itself or as a constituent of another substance:

Kilograms

>10 - 100

The amount of substance that was created:

>0 - 1

The amount of substance that was contained in product:

>0 - 1

\*On-site releases from the facility to air, water and land, as well as on and off-site disposal and off-site recycling for any of the above substances can be viewed by searching for this facility at <http://www.ec.gc.ca/inrp-npri/default.asp?lang=en>.

#### **Was a Toxic Substance Reduction Plan prepared for this substance during the reporting period?**

A toxic substance reduction plan was prepared for this substance for the 2011 reporting period.

#### **Toxic Substance Reduction Plan Objective**

Domtar Inc. – Espanola Mill does not intend to reduce its use of this metal (and its compounds) because it is an undesirable trace contaminant in raw materials (wood chips, natural gas and chemicals) for which there is no viable alternative. Based on the information gathered in this report, the amount of this metal (and its compounds) used is not expected to significantly increase. Domtar Inc. – Espanola Mill is committed to developing and implementing measures to ensure sustainable use of materials, resources and energy.

#### **Implemented Options**

No options were identified to be technically or economically feasible. Therefore, no option was implemented for the reduction of this substance.

Substance:	Hexavalent chromium compounds
CAS Number:	NA - 19

On a facility-wide basis:

Amount that entered the facility as the substance itself or as a constituent of another substance:

Kilograms

>0 - 1

The amount of substance that was created:

>10 - 100

The amount of substance that was contained in product:

>0 - 1

\*On-site releases from the facility to air, water and land, as well as on and off-site disposal and off-site recycling for any of the above substances can be viewed by searching for this facility at <http://www.ec.gc.ca/inrp-npri/default.asp?lang=en>.

#### **Was a Toxic Substance Reduction Plan prepared for this substance during the reporting period?**

A toxic substance reduction plan was prepared for this substance for the 2011 reporting period.

#### **Toxic Substance Reduction Plan Objective**

Domtar Inc. – Espanola Mill does not intend to reduce its creation of Hexavalent Chromium because it is an undesirable trace contaminant created as a by-product of combustion for which there is no viable alternative. Based on the information gathered in this report, the amount of Hexavalent Chromium created is not expected to significantly increase. Domtar Inc. – Espanola Mill is committed to developing and implementing measures to ensure sustainable use of materials, resources and energy.

#### **Implemented Options**

No options were identified to be technically or economically feasible. Therefore, no option was implemented for the reduction of this substance.

Substance:  
CAS Number:

Lead (and its compounds)
NA - 08

On a facility-wide basis:

Amount that entered the facility as the substance itself or as a constituent of another substance:

The amount of substance that was created:

The amount of substance that was contained in product:

Kilograms

>1000 - 10000
>0 - 1
>10 - 100

\*On-site releases from the facility to air, water and land, as well as on and off-site disposal and off-site recycling for any of the above substances can be viewed by searching for this facility at <http://www.ec.gc.ca/inrp-npri/default.asp?lang=en>.

**Was a Toxic Substance Reduction Plan prepared for this substance during the reporting period?**

A toxic substance reduction plan was prepared for this substance for the 2011 reporting period.

**Toxic Substance Reduction Plan Objective**

Domtar Inc. – Espanola Mill does not intend to reduce its use of this metal (and its compounds) because it is an undesirable trace contaminant in raw materials (wood chips, natural gas and chemicals) for which there is no viable alternative. Based on the information gathered in this report, the amount of this metal (and its compounds) used is not expected to significantly increase. Domtar Inc. – Espanola Mill is committed to developing and implementing measures to ensure sustainable use of materials, resources and energy.

**Implemented Options**

No options were identified to be technically or economically feasible. Therefore, no option was implemented for the reduction of this substance.

Substance:  
CAS Number:

Mercury (and its compounds)
NA - 10

On a facility-wide basis:

Amount that entered the facility as the substance itself or as a constituent of another substance:

The amount of substance that was created:

The amount of substance that was contained in product:

Kilograms

>10 - 100
>0 - 1
>1 - 10

\*On-site releases from the facility to air, water and land, as well as on and off-site disposal and off-site recycling for any of the above substances can be viewed by searching for this facility at <http://www.ec.gc.ca/inrp-npri/default.asp?lang=en>.

**Was a Toxic Substance Reduction Plan prepared for this substance during the reporting period?**

A toxic substance reduction plan was prepared for this substance for the 2011 reporting period.

**Toxic Substance Reduction Plan Objective**

Domtar Inc. – Espanola Mill does not intend to reduce its use of this metal (and its compounds) because it is an undesirable trace contaminant in raw materials (wood chips, natural gas and chemicals) for which there is no viable alternative. Based on the information gathered in this report, the amount of this metal (and its compounds) used is not expected to significantly increase. Domtar Inc. – Espanola Mill is committed to developing and implementing measures to ensure sustainable use of materials, resources and energy.

**Implemented Options**

No options were identified to be technically or economically feasible. Therefore, no option was implemented for the reduction of this substance.

Substance:	Selenium (and its compounds)
CAS Number:	NA - 12

On a facility-wide basis:

Amount that entered the facility as the substance itself or as a constituent of another substance:

Kilograms

>100 - 1000
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>0 - 1
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>100 - 1000
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The amount of substance that was created:

The amount of substance that was contained in product:

\*On-site releases from the facility to air, water and land, as well as on and off-site disposal and off-site recycling for any of the above substances can be viewed by searching for this facility at <http://www.ec.gc.ca/inrp-npri/default.asp?lang=en>.

#### **Was a Toxic Substance Reduction Plan prepared for this substance during the reporting period?**

A toxic substance reduction plan was prepared for this substance for the 2011 reporting period.

#### **Toxic Substance Reduction Plan Objective**

Domtar Inc. – Espanola Mill does not intend to reduce its use of this metal (and its compounds) because it is an undesirable trace contaminant in raw materials (wood chips, natural gas and chemicals) for which there is no viable alternative. Based on the information gathered in this report, the amount of this metal (and its compounds) used is not expected to significantly increase. Domtar Inc. – Espanola Mill is committed to developing and implementing measures to ensure sustainable use of materials, resources and energy.

#### **Implemented Options**

No options were identified to be technically or economically feasible. Therefore, no option was implemented for the reduction of this substance.

Substance:	Acenaphthylene
CAS Number:	208-96-8

On a facility-wide basis:

Amount that entered the facility as the substance itself or as a constituent of another substance:

Kilograms

>0 - 1
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>10 - 100
-----------

>0 - 1
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The amount of substance that was created:

The amount of substance that was contained in product:

\*On-site releases from the facility to air, water and land, as well as on and off-site disposal and off-site recycling for any of the above substances can be viewed by searching for this facility at <http://www.ec.gc.ca/inrp-npri/default.asp?lang=en>.

#### **Was a Toxic Substance Reduction Plan prepared for this substance during the reporting period?**

A toxic substance reduction plan was prepared for this substance for the 2011 reporting period.

#### **Toxic Substance Reduction Plan Objective**

Domtar Inc. – Espanola Mill does not intend to reduce its creation of PAHs because they are an undesirable trace contaminants created within the manufacturing process for which there is no viable process alternative. Based on the information gathered in this report, the amount of PAHs created is not expected to change. Domtar Inc. – Espanola Mill is committed to developing and implementing measures to ensure sustainable use of materials, resources and energy.

#### **Implemented Options**

No options were identified to be technically or economically feasible. Therefore, no option was implemented for the reduction of this substance.

Substance:	Fluoranthene
CAS Number:	206-44-0

On a facility-wide basis:

Amount that entered the facility as the substance itself or as a constituent of another substance:

Kilograms

>0 - 1

>10 - 100

>0 - 1

The amount of substance that was created:

The amount of substance that was contained in product:

\*On-site releases from the facility to air, water and land, as well as on and off-site disposal and off-site recycling for any of the above substances can be viewed by searching for this facility at <http://www.ec.gc.ca/inrp-npri/default.asp?lang=en>.

#### **Was a Toxic Substance Reduction Plan prepared for this substance during the reporting period?**

A toxic substance reduction plan was prepared for this substance for the 2011 reporting period.

#### **Toxic Substance Reduction Plan Objective**

Domtar Inc. – Espanola Mill does not intend to reduce its creation of PAHs because they are an undesirable trace contaminants created within the manufacturing process for which there is no viable process alternative. Based on the information gathered in this report, the amount of PAHs created is not expected to change. Domtar Inc. – Espanola Mill is committed to developing and implementing measures to ensure sustainable use of materials, resources and energy.

#### **Implemented Options**

No options were identified to be technically or economically feasible. Therefore, no option was implemented for the reduction of this substance.

Substance:	Phenanthrene
CAS Number:	85-01-8

On a facility-wide basis:

Amount that entered the facility as the substance itself or as a constituent of another substance:

Kilograms

>0 - 1

>100 - 1000

>0 - 1

The amount of substance that was created:

The amount of substance that was contained in product:

\*On-site releases from the facility to air, water and land, as well as on and off-site disposal and off-site recycling for any of the above substances can be viewed by searching for this facility at <http://www.ec.gc.ca/inrp-npri/default.asp?lang=en>.

#### **Was a Toxic Substance Reduction Plan prepared for this substance during the reporting period?**

A toxic substance reduction plan was prepared for this substance for the 2011 reporting period.

#### **Toxic Substance Reduction Plan Objective**

Domtar Inc. – Espanola Mill does not intend to reduce its creation of PAHs because they are an undesirable trace contaminants created within the manufacturing process for which there is no viable process alternative. Based on the information gathered in this report, the amount of PAHs created is not expected to change. Domtar Inc. – Espanola Mill is committed to developing and implementing measures to ensure sustainable use of materials, resources and energy.

#### **Implemented Options**

No options were identified to be technically or economically feasible. Therefore, no option was implemented for the reduction of this substance.

Substance:  
CAS Number:

Pyrene
129-00-0

On a facility-wide basis:

Amount that entered the facility as the substance itself or as a constituent of another substance:

Kilograms

>0 - 1

>10 - 100

>0 - 1

The amount of substance that was created:

The amount of substance that was contained in product:

\*On-site releases from the facility to air, water and land, as well as on and off-site disposal and off-site recycling for any of the above substances can be viewed by searching for this facility at <http://www.ec.gc.ca/inrp-npri/default.asp?lang=en>.

**Was a Toxic Substance Reduction Plan prepared for this substance during the reporting period?**

A toxic substance reduction plan was prepared for this substance for the 2011 reporting period.

**Toxic Substance Reduction Plan Objective**

Domtar Inc. – Espanola Mill does not intend to reduce its creation of PAHs because they are an undesirable trace contaminants created within the manufacturing process for which there is no viable process alternative. Based on the information gathered in this report, the amount of PAHs created is not expected to change. Domtar Inc. – Espanola Mill is committed to developing and implementing measures to ensure sustainable use of materials, resources and energy.

**Implemented Options**

No options were identified to be technically or economically feasible. Therefore, no option was implemented for the reduction of this substance.

Substance:  
CAS Number:

1,2,3,4,6,7,8-Heptachlorodibenzofuran
67562-39-4

On a facility-wide basis:

Amount that entered the facility as the substance itself or as a constituent of another substance:

Grams

>0 - 1

>0 - 1

>0 - 1

The amount of substance that was created:

The amount of substance that was contained in product:

\*On-site releases from the facility to air, water and land, as well as on and off-site disposal and off-site recycling for any of the above substances can be viewed by searching for this facility at <http://www.ec.gc.ca/inrp-npri/default.asp?lang=en>.

**Was a Toxic Substance Reduction Plan prepared for this substance during the reporting period?**

A toxic substance reduction plan was prepared for this substance for the 2011 reporting period.

**Toxic Substance Reduction Plan Objective**

Domtar Inc. – Espanola Mill does not intend to reduce its creation of Dioxin and Furans (D/Fs) because they are undesirable trace contaminants created within combustion process for which there is no viable process alternative. Domtar Inc. – Espanola Mill is committed to developing and implementing measures to ensure sustainable use of materials, resources and energy.

**Implemented Options**

No options were identified to be technically or economically feasible. Therefore, no option was implemented for the reduction of this substance.

Substance:	1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin
CAS Number:	35822-46-9

On a facility-wide basis:

Amount that entered the facility as the substance itself or as a constituent of another substance:

The amount of substance that was created:

The amount of substance that was contained in product:

Grams

>0 - 1

>0 - 1

>0 - 1

\*On-site releases from the facility to air, water and land, as well as on and off-site disposal and off-site recycling for any of the above substances can be viewed by searching for this facility at <http://www.ec.gc.ca/inrp-npri/default.asp?lang=en>.

#### **Was a Toxic Substance Reduction Plan prepared for this substance during the reporting period?**

A toxic substance reduction plan was prepared for this substance for the 2011 reporting period.

#### **Toxic Substance Reduction Plan Objective**

Domtar Inc. – Espanola Mill does not intend to reduce its creation of Dioxin and Furans (D/Fs) because they are undesirable trace contaminants created within combustion process for which there is no viable process alternative. Domtar Inc. – Espanola Mill is committed to developing and implementing measures to ensure sustainable use of materials, resources and energy.

#### **Implemented Options**

No options were identified to be technically or economically feasible. Therefore, no option was implemented for the reduction of this substance.

Substance:	1,2,3,4,7,8,9-Heptachlorodibenzofuran
CAS Number:	55673-89-7

On a facility-wide basis:

Amount that entered the facility as the substance itself or as a constituent of another substance:

The amount of substance that was created:

The amount of substance that was contained in product:

Grams

>0 - 1

>1 - 10

>0 - 1

\*On-site releases from the facility to air, water and land, as well as on and off-site disposal and off-site recycling for any of the above substances can be viewed by searching for this facility at <http://www.ec.gc.ca/inrp-npri/default.asp?lang=en>.

#### **Was a Toxic Substance Reduction Plan prepared for this substance during the reporting period?**

A toxic substance reduction plan was prepared for this substance for the 2011 reporting period.

#### **Toxic Substance Reduction Plan Objective**

Domtar Inc. – Espanola Mill does not intend to reduce its creation of Dioxin and Furans (D/Fs) because they are undesirable trace contaminants created within combustion process for which there is no viable process alternative. Domtar Inc. – Espanola Mill is committed to developing and implementing measures to ensure sustainable use of materials, resources and energy.

#### **Implemented Options**

No options were identified to be technically or economically feasible. Therefore, no option was implemented for the reduction of this substance.

Substance:	1,2,3,4,7,8-Hexachlorodibenzofuran
CAS Number:	70648-26-9

On a facility-wide basis:

Amount that entered the facility as the substance itself or as a constituent of another substance:

The amount of substance that was created:

The amount of substance that was contained in product:

Grams

>0 - 1
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>0 - 1
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>0 - 1
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\*On-site releases from the facility to air, water and land, as well as on and off-site disposal and off-site recycling for any of the above substances can be viewed by searching for this facility at <http://www.ec.gc.ca/inrp-npri/default.asp?lang=en>.

#### **Was a Toxic Substance Reduction Plan prepared for this substance during the reporting period?**

A toxic substance reduction plan was prepared for this substance for the 2011 reporting period.

#### **Toxic Substance Reduction Plan Objective**

Domtar Inc. – Espanola Mill does not intend to reduce its creation of Dioxin and Furans (D/Fs) because they are undesirable trace contaminants created within combustion process for which there is no viable process alternative. Domtar Inc. – Espanola Mill is committed to developing and implementing measures to ensure sustainable use of materials, resources and energy.

#### **Implemented Options**

No options were identified to be technically or economically feasible. Therefore, no option was implemented for the reduction of this substance.

Substance:	1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin
CAS Number:	39227-28-6

On a facility-wide basis:

Amount that entered the facility as the substance itself or as a constituent of another substance:

The amount of substance that was created:

The amount of substance that was contained in product:

Grams

>0 - 1
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>0 - 1
--------

>0 - 1
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\*On-site releases from the facility to air, water and land, as well as on and off-site disposal and off-site recycling for any of the above substances can be viewed by searching for this facility at <http://www.ec.gc.ca/inrp-npri/default.asp?lang=en>.

#### **Was a Toxic Substance Reduction Plan prepared for this substance during the reporting period?**

A toxic substance reduction plan was prepared for this substance for the 2011 reporting period.

#### **Toxic Substance Reduction Plan Objective**

Domtar Inc. – Espanola Mill does not intend to reduce its creation of Dioxin and Furans (D/Fs) because they are undesirable trace contaminants created within combustion process for which there is no viable process alternative. Domtar Inc. – Espanola Mill is committed to developing and implementing measures to ensure sustainable use of materials, resources and energy.

#### **Implemented Options**

No options were identified to be technically or economically feasible. Therefore, no option was implemented for the reduction of this substance.

Substance:	1,2,3,6,7,8-Hexachlorodibenzofuran
CAS Number:	57117-44-9

On a facility-wide basis:

Amount that entered the facility as the substance itself or as a constituent of another substance:

Grams

>0 - 1

The amount of substance that was created:

>0 - 1

The amount of substance that was contained in product:

>0 - 1

\*On-site releases from the facility to air, water and land, as well as on and off-site disposal and off-site recycling for any of the above substances can be viewed by searching for this facility at <http://www.ec.gc.ca/inrp-npri/default.asp?lang=en>.

#### **Was a Toxic Substance Reduction Plan prepared for this substance during the reporting period?**

A toxic substance reduction plan was prepared for this substance for the 2011 reporting period.

#### **Toxic Substance Reduction Plan Objective**

Domtar Inc. – Espanola Mill does not intend to reduce its creation of Dioxin and Furans (D/Fs) because they are undesirable trace contaminants created within combustion process for which there is no viable process alternative. Domtar Inc. – Espanola Mill is committed to developing and implementing measures to ensure sustainable use of materials, resources and energy.

#### **Implemented Options**

No options were identified to be technically or economically feasible. Therefore, no option was implemented for the reduction of this substance.

Substance:	1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin
CAS Number:	57653-85-7

On a facility-wide basis:

Amount that entered the facility as the substance itself or as a constituent of another substance:

Grams

>0 - 1

The amount of substance that was created:

>0 - 1

The amount of substance that was contained in product:

>0 - 1

\*On-site releases from the facility to air, water and land, as well as on and off-site disposal and off-site recycling for any of the above substances can be viewed by searching for this facility at <http://www.ec.gc.ca/inrp-npri/default.asp?lang=en>.

#### **Was a Toxic Substance Reduction Plan prepared for this substance during the reporting period?**

A toxic substance reduction plan was prepared for this substance for the 2011 reporting period.

#### **Toxic Substance Reduction Plan Objective**

Domtar Inc. – Espanola Mill does not intend to reduce its creation of Dioxin and Furans (D/Fs) because they are undesirable trace

#### **Implemented Options**

No options were identified to be technically or economically feasible. Therefore, no option was implemented for the reduction of this substance.

Substance:	1,2,3,7,8,9-Hexachlorodibenzofuran
CAS Number:	72918-21-9

On a facility-wide basis:

Amount that entered the facility as the substance itself or as a constituent of another substance:

The amount of substance that was created:

The amount of substance that was contained in product:

Grams

>0 - 1

>0 - 1

>0 - 1

\*On-site releases from the facility to air, water and land, as well as on and off-site disposal and off-site recycling for any of the above substances can be viewed by searching for this facility at <http://www.ec.gc.ca/inrp-npri/default.asp?lang=en>.

**Was a Toxic Substance Reduction Plan prepared for this substance during the reporting period?**

A toxic substance reduction plan was prepared for this substance for the 2011 reporting period.

**Toxic Substance Reduction Plan Objective**

Domtar Inc. – Espanola Mill does not intend to reduce its creation of Dioxin and Furans (D/Fs) because they are undesirable trace contaminants created within combustion process for which there is no viable process alternative. Domtar Inc. – Espanola Mill is committed to developing and implementing measures to ensure sustainable use of materials, resources and energy.

**Implemented Options**

No options were identified to be technically or economically feasible. Therefore, no option was implemented for the reduction of this substance.

Substance:	1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin
CAS Number:	19408-74-3

On a facility-wide basis:

Amount that entered the facility as the substance itself or as a constituent of another substance:

The amount of substance that was created:

The amount of substance that was contained in product:

Grams

>0 - 1

>0 - 1

>0 - 1

\*On-site releases from the facility to air, water and land, as well as on and off-site disposal and off-site recycling for any of the above substances can be viewed by searching for this facility at <http://www.ec.gc.ca/inrp-npri/default.asp?lang=en>.

**Was a Toxic Substance Reduction Plan prepared for this substance during the reporting period?**

A toxic substance reduction plan was prepared for this substance for the 2011 reporting period.

**Toxic Substance Reduction Plan Objective**

Domtar Inc. – Espanola Mill does not intend to reduce its creation of Dioxin and Furans (D/Fs) because they are undesirable trace contaminants created within combustion process for which there is no viable process alternative. Domtar Inc. – Espanola Mill is committed to developing and implementing measures to ensure sustainable use of materials, resources and energy.

**Implemented Options**

No options were identified to be technically or economically feasible. Therefore, no option was implemented for the reduction of this substance.

Substance:	1,2,3,7,8-Pentachlorodibenzofuran
CAS Number:	57117-41-6

On a facility-wide basis:

Amount that entered the facility as the substance itself or as a constituent of another substance:

Grams

>0 - 1

The amount of substance that was created:

>0 - 1

The amount of substance that was contained in product:

>0 - 1

\*On-site releases from the facility to air, water and land, as well as on and off-site disposal and off-site recycling for any of the above substances can be viewed by searching for this facility at <http://www.ec.gc.ca/inrp-npri/default.asp?lang=en>.

**Was a Toxic Substance Reduction Plan prepared for this substance during the reporting period?**

A toxic substance reduction plan was prepared for this substance for the 2011 reporting period.

**Toxic Substance Reduction Plan Objective**

Domtar Inc. – Espanola Mill does not intend to reduce its creation of Dioxin and Furans (D/Fs) because they are undesirable trace contaminants created within combustion process for which there is no viable process alternative. Domtar Inc. – Espanola Mill is committed to developing and implementing measures to ensure sustainable use of materials, resources and energy.

**Implemented Options**

No options were identified to be technically or economically feasible. Therefore, no option was implemented for the reduction of this substance.

Substance:	1,2,3,7,8-Pentachlorodibenzo-p-dioxin
CAS Number:	40321-76-4

On a facility-wide basis:

Amount that entered the facility as the substance itself or as a constituent of another substance:

Grams

>0 - 1

The amount of substance that was created:

>0 - 1

The amount of substance that was contained in product:

>0 - 1

\*On-site releases from the facility to air, water and land, as well as on and off-site disposal and off-site recycling for any of the above substances can be viewed by searching for this facility at <http://www.ec.gc.ca/inrp-npri/default.asp?lang=en>.

**Was a Toxic Substance Reduction Plan prepared for this substance during the reporting period?**

A toxic substance reduction plan was prepared for this substance for the 2011 reporting period.

**Toxic Substance Reduction Plan Objective**

Domtar Inc. – Espanola Mill does not intend to reduce its creation of Dioxin and Furans (D/Fs) because they are undesirable trace contaminants created within combustion process for which there is no viable process alternative. Domtar Inc. – Espanola Mill is committed to developing and implementing measures to ensure sustainable use of materials, resources and energy.

**Implemented Options**

No options were identified to be technically or economically feasible. Therefore, no option was implemented for the reduction of this substance.

Substance:  
CAS Number:

2,3,4,6,7,8-Hexachlorodibenzofuran
60851-34-5

On a facility-wide basis:

Amount that entered the facility as the substance itself or as a constituent of another substance:

The amount of substance that was contained in product:

Grams

>0 - 1
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>0 - 1
--------

\*On-site releases from the facility to air, water and land, as well as on and off-site disposal and off-site recycling for any of the above substances can be viewed by searching for this facility at <http://www.ec.gc.ca/inrp-npri/default.asp?lang=en>.

**Was a Toxic Substance Reduction Plan prepared for this substance during the reporting period?**

A toxic substance reduction plan was prepared for this substance for the 2011 reporting period.

**Toxic Substance Reduction Plan Objective**

Domtar Inc. – Espanola Mill does not intend to reduce its creation of Dioxin and Furans (D/Fs) because they are undesirable trace contaminants created within combustion process for which there is no viable process alternative. Domtar Inc. – Espanola Mill is committed to developing and implementing measures to ensure sustainable use of materials, resources and energy.

**Implemented Options**

No options were identified to be technically or economically feasible. Therefore, no option was implemented for the reduction of this substance.

Substance:  
CAS Number:

2,3,4,7,8-Pentachlorodibenzofuran
57117-31-4

On a facility-wide basis:

Amount that entered the facility as the substance itself or as a constituent of another substance:

The amount of substance that was created:

The amount of substance that was contained in product:

Grams

>0 - 1
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>0 - 1
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>0 - 1
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\*On-site releases from the facility to air, water and land, as well as on and off-site disposal and off-site recycling for any of the above substances can be viewed by searching for this facility at <http://www.ec.gc.ca/inrp-npri/default.asp?lang=en>.

**Was a Toxic Substance Reduction Plan prepared for this substance during the reporting period?**

A toxic substance reduction plan was prepared for this substance for the 2011 reporting period.

**Toxic Substance Reduction Plan Objective**

Domtar Inc. – Espanola Mill does not intend to reduce its creation of Dioxin and Furans (D/Fs) because they are undesirable trace contaminants created within combustion process for which there is no viable process alternative. Domtar Inc. – Espanola Mill is committed to developing and implementing measures to ensure sustainable use of materials, resources and energy.

**Implemented Options**

No options were identified to be technically or economically feasible. Therefore, no option was implemented for the reduction of this substance.

Substance:	2,3,7,8-Tetrachlorodibenzofuran
CAS Number:	51207-31-9

On a facility-wide basis:

Amount that entered the facility as the substance itself or as a constituent of another substance:

The amount of substance that was created:

The amount of substance that was contained in product:

Grams

>0 - 1

>0 - 1

>0 - 1

\*On-site releases from the facility to air, water and land, as well as on and off-site disposal and off-site recycling for any of the above substances can be viewed by searching for this facility at <http://www.ec.gc.ca/inrp-npri/default.asp?lang=en>.

**Was a Toxic Substance Reduction Plan prepared for this substance during the reporting period?**

A toxic substance reduction plan was prepared for this substance for the 2011 reporting period.

**Toxic Substance Reduction Plan Objective**

Domtar Inc. – Espanola Mill does not intend to reduce its creation of Dioxin and Furans (D/Fs) because they are undesirable trace contaminants created within combustion process for which there is no viable process alternative. Domtar Inc. – Espanola Mill is committed to developing and implementing measures to ensure sustainable use of materials, resources and energy.

**Implemented Options**

No options were identified to be technically or economically feasible. Therefore, no option was implemented for the reduction of this substance.

Substance:	2,3,7,8-Tetrachlorodibenzo-p-dioxin
CAS Number:	1746-01-6

On a facility-wide basis:

Amount that entered the facility as the substance itself or as a constituent of another substance:

The amount of substance that was created:

The amount of substance that was contained in product:

Grams

>0 - 1

>0 - 1

>0 - 1

\*On-site releases from the facility to air, water and land, as well as on and off-site disposal and off-site recycling for any of the above substances can be viewed by searching for this facility at <http://www.ec.gc.ca/inrp-npri/default.asp?lang=en>.

**Was a Toxic Substance Reduction Plan prepared for this substance during the reporting period?**

A toxic substance reduction plan was prepared for this substance for the 2011 reporting period.

**Toxic Substance Reduction Plan Objective**

Domtar Inc. – Espanola Mill does not intend to reduce its creation of Dioxin and Furans (D/Fs) because they are undesirable trace contaminants created within combustion process for which there is no viable process alternative. Domtar Inc. – Espanola Mill is committed to developing and implementing measures to ensure sustainable use of materials, resources and energy.

**Implemented Options**

No options were identified to be technically or economically feasible. Therefore, no option was implemented for the reduction of this substance.

Substance:	Octachlorodibenzofuran
CAS Number:	39001-02-0

On a facility-wide basis:

Amount that entered the facility as the substance itself or as a constituent of another substance:

The amount of substance that was created:

The amount of substance that was contained in product:

Grams

>0 - 1
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>0 - 1
--------

>0 - 1
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\*On-site releases from the facility to air, water and land, as well as on and off-site disposal and off-site recycling for any of the above substances can be viewed by searching for this facility at <http://www.ec.gc.ca/inrp-npri/default.asp?lang=en>.

**Was a Toxic Substance Reduction Plan prepared for this substance during the reporting period?**

A toxic substance reduction plan was prepared for this substance for the 2011 reporting period.

**Toxic Substance Reduction Plan Objective**

Domtar Inc. – Espanola Mill does not intend to reduce its creation of Dioxin and Furans (D/Fs) because they are undesirable trace contaminants created within combustion process for which there is no viable process alternative. Domtar Inc. – Espanola Mill is committed to developing and implementing measures to ensure sustainable use of materials, resources and energy.

**Implemented Options**

No options were identified to be technically or economically feasible. Therefore, no option was implemented for the reduction of this substance.

Substance:	Octachlorodibenzo-p-dioxin
CAS Number:	3268-87-9

On a facility-wide basis:

Amount that entered the facility as the substance itself or as a constituent of another substance:

The amount of substance that was created:

The amount of substance that was contained in product:

Grams

>0 - 1
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>10 - 100
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>0 - 1
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\*On-site releases from the facility to air, water and land, as well as on and off-site disposal and off-site recycling for any of the above substances can be viewed by searching for this facility at <http://www.ec.gc.ca/inrp-npri/default.asp?lang=en>.

**Was a Toxic Substance Reduction Plan prepared for this substance during the reporting period?**

A toxic substance reduction plan was prepared for this substance for the 2011 reporting period.

**Toxic Substance Reduction Plan Objective**

Domtar Inc. – Espanola Mill does not intend to reduce its creation of Dioxin and Furans (D/Fs) because they are undesirable trace contaminants created within combustion process for which there is no viable process alternative. Domtar Inc. – Espanola Mill is committed to developing and implementing measures to ensure sustainable use of materials, resources and energy.

**Implemented Options**

No options were identified to be technically or economically feasible. Therefore, no option was implemented for the reduction of this substance.

Substance:  
CAS Number:

Hexachlorobenzene  
118-74-1

On a facility-wide basis:

Amount that entered the facility as the substance itself or as a constituent of another substance:

The amount of substance that was created:

The amount of substance that was contained in product:

Grams

>0 - 1

>1 - 10

>0 - 1

\*On-site releases from the facility to air, water and land, as well as on and off-site disposal and off-site recycling for any of the above substances can be viewed by searching for this facility at <http://www.ec.gc.ca/inrp-npri/default.asp?lang=en>.

#### **Was a Toxic Substance Reduction Plan prepared for this substance during the reporting period?**

A toxic substance reduction plan was prepared for this substance for the 2011 reporting period.

#### **Toxic Substance Reduction Plan Objective**

Domtar Inc. – Espanola Mill does not intend to reduce its creation of HCB because it is an undesirable trace contaminant created within combustion process for which there is no viable process alternative. Based on the information gathered, the amount of HCB created is not expected to change. Domtar Inc. – Espanola Mill is committed to developing and implementing measures to ensure sustainable use of materials, resources and energy.

#### **Implemented Options**

No options were identified to be technically or economically feasible. Therefore, no option was implemented for the reduction of this substance.

Substance:  
CAS Number:

Carbon Monoxide  
630-08-0

On a facility-wide basis:

Amount that entered the facility as the substance itself or

The amount of substance that was created:

Metric Tonnes

>0 - 1

>1000 - 10000

\*On-site releases from the facility to air, water and land, as well as on and off-site disposal and off-site recycling for any of the above substances can be viewed by searching for this facility at <http://www.ec.gc.ca/inrp-npri/default.asp?lang=en>.

A toxic substance reduction plan was prepared for this substance for the 2012 reporting period.

#### **Toxic Substance Reduction Plan Objective**

Carbon Monoxide is created and released on-site through the combustion of various fuels for Chemical Recovery, Power Generation and Ancillary processes such as building heating requirements. In Kraft pulp mills and pulp mills that practice either oxygen delignification or pulp bleaching with chlorine dioxide (ClO<sub>2</sub>), CO is also formed during these delignification processes and released to the atmosphere. Carbon Monoxide is not found within material feedstock used by the Kraft pulp manufacturing operation.

#### **Implemented Options**

Domtar installed in 2016 a CO monitor on its Bark Boiler. This additional monitor will allow for improved boiler control which could improve emissions.

Substance:	Nitrogen oxides (expressed as NO <sub>2</sub> )
CAS Number:	11104-93-1

On a facility-wide basis:

Amount that entered the facility as the substance itself or as a constituent of another substance:

The amount of substance that was created:

Metric Tonnes

>0 - 1

>1000 - 10000

\*On-site releases from the facility to air, water and land, as well as on and off-site disposal and off-site recycling for any of the above substances can be viewed by searching for this facility at <http://www.ec.gc.ca/inrp-npri/default.asp?lang=en>.

#### **Was a Toxic Substance Reduction Plan prepared for this substance during the reporting period?**

A toxic substance reduction plan was prepared for this substance for the 2012 reporting period.

#### **Toxic Substance Reduction Plan Objective**

The Domtar Inc. – Espanola Mill is committed to developing and implementing measures to ensure sustainable use of materials, resources and energy. Domtar Incorporated – Espanola Mill does not intend to reduce its creation of Nitrogen Oxides as no viable alternative was identified.

#### **Implemented Options**

No options were identified to be technically or economically feasible. Therefore, no option was implemented for the reduction of this substance.

Substance:	PM2.5 - Particulate Matter <= 2.5 Microns
CAS Number:	NA - M10

On a facility-wide basis:

Amount that entered the facility as the substance itself or as a constituent of another substance:

The amount of substance that was created:

Metric Tonnes

>0 - 1

>10000 - 100000

\*On-site releases from the facility to air, water and land, as well as on and off-site disposal and off-site recycling for any of the above substances can be viewed by searching for this facility at <http://www.ec.gc.ca/inrp-npri/default.asp?lang=en>.

#### **Was a Toxic Substance Reduction Plan prepared for this substance during the reporting period?**

A toxic substance reduction plan was prepared for this substance for the 2012 reporting period.

#### **Toxic Substance Reduction Plan Objective**

Domtar Incorporated – Espanola Mill is committed to developing and implementing measures to ensure sustainable use of materials, resources and energy. Domtar Incorporated – Espanola Mill does intend to reduce its creation of PM2.5.

#### **Implemented Options**

Domtar intends to install a CO monitor on the Bark Boiler to reduce emissions including PM2.5

Substance:  
CAS Number:

PM10 - Particulate Matter <= 10 Microns

NA - M09

On a facility-wide basis:

Amount that entered the facility as the substance itself or as a constituent of another substance:

Metric Tonnes

>0 - 1

The amount of substance that was created:

>10000 - 100000

\*On-site releases from the facility to air, water and land, as well as on and off-site disposal and off-site recycling for any of the above substances can be viewed by searching for this facility at <http://www.ec.gc.ca/inrp-npri/default.asp?lang=en>.

**Was a Toxic Substance Reduction Plan prepared for this substance during the reporting period?**

A toxic substance reduction plan was prepared for this substance for the 2012 reporting period.

**Toxic Substance Reduction Plan Objective**

Domtar Incorporated – Espanola Mill is committed to developing and implementing measures to ensure sustainable use of materials, resources and energy. Domtar Incorporated – Espanola Mill intends to reduce its creation of PM10.

Domtar intends to install a CO monitor on the Bark Boiler to reduce emissions including PM10.

Substance:  
CAS Number:

PM - Total Particulate Matter <= 100 Microns

NA - M08

On a facility-wide basis:

Amount that entered the facility as the substance itself or as a constituent of another substance:

Metric Tonnes

>0 - 1

The amount of substance that was created:

>10000 - 100000

\*On-site releases from the facility to air, water and land, as well as on and off-site disposal and off-site recycling for any of the above substances can be viewed by searching for this facility at <http://www.ec.gc.ca/inrp-npri/default.asp?lang=en>.

**Was a Toxic Substance Reduction Plan prepared for this substance during the reporting period?**

A toxic substance reduction plan was prepared for this substance for the 2012 reporting period.

**Toxic Substance Reduction Plan Objective**

The Domtar Inc. – Espanola Mill is committed to developing and implementing measures to ensure sustainable use of materials, resources and energy. Domtar Incorporated – Espanola Mill intends to reduce its creation of Total Particulate Matter.

**Implemented Options**

Domtar installed in 2016 a CO monitor on its Bark Boiler. This additional monitor will allow for improved boiler control which could improve emissions.

Substance:  
CAS Number:

Sulphur dioxide
7446-09-5

On a facility-wide basis:

Amount that entered the facility as the substance itself or as a constituent of another substance:

The amount of substance that was created:

Metric Tonnes
>0 - 1
>100 - 1000

\*On-site releases from the facility to air, water and land, as well as on and off-site disposal and off-site recycling for any of the above substances can be viewed by searching for this facility at <http://www.ec.gc.ca/inrp-npri/default.asp?lang=en>.

**Was a Toxic Substance Reduction Plan prepared for this substance during the reporting period?**

A toxic substance reduction plan was prepared for this substance for the 2012 reporting period.

**Toxic Substance Reduction Plan Objective**

Domtar Incorporated – Espanola Mill intends to reduce its creation of Sulphur Dioxide from the Recovery Boiler. Domtar Incorporated – Espanola Mill is committed to developing and implementing measures to ensure sustainable use of materials, resources and energy.

**Implemented Options**

Improved Operating Practices consisting of; Liquor Sulphidity target was lowered and Recovery Boiler liquor temperature and bed temperature were optimized. These options will reduce the creation of Sulphur Dioxide from the Recovery boiler.

Substance:  
CAS Number:

Ethyl Alcohol
64-17-5

On a facility-wide basis:

Amount that entered the facility as the substance itself or as a constituent of another substance:

The amount of substance that was created:

Metric Tonnes
>0 - 1
>1 - 10

\*On-site releases from the facility to air, water and land, as well as on and off-site disposal and off-site recycling for any of the above substances can be viewed by searching for this facility at <http://www.ec.gc.ca/inrp-npri/default.asp?lang=en>.

**Was a Toxic Substance Reduction Plan prepared for this substance during the reporting period?**

A toxic substance reduction plan was prepared for this substance for the 2012 reporting period.

**Toxic Substance Reduction Plan Objective**

The Domtar Incorporated – Espanola Mill is committed to developing and implementing measures to ensure sustainable use of materials, resources and energy. Domtar Incorporated – Espanola Mill intends to reduce its creation of Ethyl Alcohol. Based on the information gathered in this report, the amount of Ethyl alcohol created is not expected to significantly increase.

**Implemented Options**

Domtar installed in 2016 a CO monitor on its Bark Boiler. This additional monitor will allow for improved boiler control which could improve emissions.

Substance:  
CAS Number:

D-Limonene
5989-27-5

On a facility-wide basis:

Amount that entered the facility as the substance itself or as a constituent of another substance:

Metric Tonnes

>1 - 10

The amount of substance that was created:

>0 - 1

\*On-site releases from the facility to air, water and land, as well as on and off-site disposal and off-site recycling for any of the above substances can be viewed by searching for this facility at <http://www.ec.gc.ca/inrp-npri/default.asp?lang=en>.

**Was a Toxic Substance Reduction Plan prepared for this substance during the reporting period?**

A toxic substance reduction plan was prepared for this substance for the 2012 reporting period.

**Toxic Substance Reduction Plan Objective**

The Domtar Inc. – Espanola Mill is committed to developing and implementing measures to ensure sustainable use of materials, resources and energy. Domtar Incorporated – Espanola Mill does not intend to reduce its use of D-Limonene because it is an undesirable trace contaminant in raw materials (softwood chips) for which there is no viable alternative. Based on the information gathered in this report, the amount of D-Limonene used is expected to increase due to increased softwood pulp production.

**Implemented Options**

No options were identified to be technically or economically feasible. Therefore, no option was implemented for the reduction of this substance.

Substance:  
CAS Number:

Alpha-Pinene
80-56-8

On a facility-wide basis:

Amount that entered the facility as the substance itself or as a constituent of another substance:

Metric Tonnes

>10 - 100

The amount of substance that was created:

>0 - 1

\*On-site releases from the facility to air, water and land, as well as on and off-site disposal and off-site recycling for any of the above substances can be viewed by searching for this facility at <http://www.ec.gc.ca/inrp-npri/default.asp?lang=en>.

**Was a Toxic Substance Reduction Plan prepared for this substance during the reporting period?**

A toxic substance reduction plan was prepared for this substance for the 2012 reporting period.

**Toxic Substance Reduction Plan Objective**

The Domtar Inc. – Espanola Mill is committed to developing and implementing measures to ensure sustainable use of materials, resources and energy. Domtar Incorporated – Espanola Mill does not intend to reduce its use of Alpha-Pinene because it is an undesirable trace contaminant in raw materials (softwood chips) for which there is no viable alternative. Based on the information gathered in this report, the amount of Alpha-Pinene used is expected to increase due to increased softwood pulp production.

**Implemented Options**

No options were identified to be technically or economically feasible. Therefore, no option was implemented for the reduction of this substance.

Substance:	Beta-Pinene
CAS Number:	127-91-3

On a facility-wide basis:

Amount that entered the facility as the substance itself or as a constituent of another substance:

Metric Tonnes

>1 - 10
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The amount of substance that was created:

>0 - 1
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\*On-site releases from the facility to air, water and land, as well as on and off-site disposal and off-site recycling for any of the above substances can be viewed by searching for this facility at <http://www.ec.gc.ca/inrp-npri/default.asp?lang=en>.

#### **Was a Toxic Substance Reduction Plan prepared for this substance during the reporting period?**

A toxic substance reduction plan was prepared for this substance for the 2012 reporting period.

#### **Toxic Substance Reduction Plan Objective**

The Domtar Inc. – Espanola Mill is committed to developing and implementing measures to ensure sustainable use of materials, resources and energy. Domtar Incorporated – Espanola Mill does not intend to reduce its use of Beta-Pinene because it is an undesirable trace contaminant in raw materials (softwood chips) for which there is no viable alternative. Based on the information gathered in this report, the amount of Beta-Pinene used is expected to increase due to increased softwood pulp produced by the facility for sale. Based on the information gathered in the toxic substance reduction plan, the amount of beta-pinene used is not expected to significantly increase.

#### **Implemented Options**

No options were identified to be technically or economically feasible. Therefore, no option was implemented for the reduction of this substance.

As of June 1, 2019, I, Carol Lapointe, certify that I have read the reports on the toxic substance reduction plans for the toxic substances referred to below and am familiar with their contents, and to my knowledge the information contained in the reports is factually accurate and the reports comply with the *Toxics Reduction Act, 2009* and Ontario Regulation 455/09 (General) made under that Act.

Acetone	Octachlorodibenzofuran	Acetaldehyde
Alpha Pinene	Ethyl Alcohol	Benzo(a)phenanthrene
Ammonia (total)	Arsenic	Phenathrene
Beta Pinene	Formaldehyde	Acenaphthylene
Cadmium	Hexachlorobenzene	Fluoranthene
Carbon Monoxide	Hexavalent chromium compounds	Pyrene
Cobalt	Hydrochloric acid	Methyl Isobutyl Ketone
Chlorine Dioxide	Hydrogen Sulphide	
2,3,7,8-Tetrachlorodibenzo-p-dioxin	Isopropyl Alcohol	
1,2,3,7,8-Pentachlorodibenzo-p-dioxin	Lead	
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin	D-Limonene	
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	Manganese	
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin	Methanol	
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	Methyl Ethyl Ketone	
Octachlorodibenzo-p-dioxin	Nitrogen Oxides	
2,3,7,8-Tetrachlorodibenzofuran	Nitrate Ion	
2,3,4,7,8-Pentachlorodibenzofuran	Phosphorus (total)	
1,2,3,7,8-Pentachlorodibenzofuran	PM <sub>2.5</sub>	
1,2,3,4,7,8-Hexachlorodibenzofuran	PM <sub>10</sub>	
1,2,3,7,8,9-Hexachlorodibenzofuran	Selenium	
1,2,3,6,7,8-Hexachlorodibenzofuran	Sulphur Dioxide	
2,3,4,6,7,8-Hexachlorodibenzofuran	Sulphuric acid	
1,2,3,4,6,7,8-Heptachlorodibenzofuran	Total Reduced Sulphuric	
1,2,3,4,7,8,9-Heptachlorodibenzofuran	Total Particulate Matter	

The original version of the toxic substance reduction plan is signed off by:

Highest Ranking Employee:

Title:

Phone Number:

Carol Lapointe

General Manager

705-869-2020

The legal and trade names of the owner and the operator of the facility, the street address of the facility and the mailing address of the facility

Domtar Inc.  
1 Station Road  
Espanola, ON P5E 1R6

Facility NPRI identification number

3185

The identification number assigned to the facility by the Ministry of the Environment for the purposes of Ontario Regulation 127/01.

5114

Number of full-time employees

545

North American Industry Classification System (NAICS) - 2, 4, and 6 digit codes

31-33

3221

322121

The name, position and telephone number of the individual who is the contact at the facility for the public:

Public Contact

Leigh Nelson

Title

Technical Services Superintendent

Phone Number

705-869-2020

UTM coordinates, x and y

X 440796

Y 5124122

UTM Zone

17

Datum

NAD27

Legal name of Canadian parent company, if your facility is a subsidiary of a Canadian parent company

Domtar Inc.

Parent company name

395, de Maisonneuve Blvd. West

Address

Montreal

City

Quebec

Province

H3A 1L6

Postal Code

100%

Percent Ownership

**Comparison of Reported Quantities**

Substance	CAS #	Year	Quantity Used	Quantity Created	Quantity Contained in Product
<b>NPRI Part 1A - Metric Tonnes</b>					
Acetaldehyde	75-07-0	2017	>0 - 1	>10 - 100	>0 - 1
		2018	>0 - 1	>10 - 100	>0 - 1
		Change	>0 - 1	>1 - 10	>0 - 1
		Change	0.0%	20.1%	0.0%
Ammonia (total)	NA - 16	2017	>0 - 1	>100 - 1000	>0 - 1
		2018	>0 - 1	>100 - 1000	>0 - 1
		Change	>0 - 1	>10 - 100	>0 - 1
		Change	0.0%	9.0%	0.0%
Chlorine	7782-50-5	2017	>0 - 1	>1 - 10	>0 - 1
		2018	>0 - 1	>1 - 10	>0 - 1
		Change	>0 - 1	>0 - 1	>0 - 1
		Change	0.0%	2.1%	0.0%
Chlorine Dioxide	10049-04-4	2017	>0 - 1	>1000 - 10000	>0 - 1
		2018	>0 - 1	>1000 - 10000	>0 - 1
		Change	>0 - 1	>100 - 1000	>0 - 1
		Change	0.0%	2.1%	0.0%
Formaldehyde	50-00-0	2017	>0 - 1	>10 - 100	>0 - 1
		2018	>0 - 1	>10 - 100	>0 - 1
		Change	>0 - 1	>1 - 10	>0 - 1
		Change	0.0%	5.6%	0.0%
Hydrochloric acid	7647-01-0	2017	>1 - 10	>10 - 100	>0 - 1
		2018	>1 - 10	>10 - 100	>0 - 1
		Change	>0 - 1	>1 - 10	>0 - 1
		Change	0.0%	8.8%	0.0%
Hydrogen sulphide	7783-06-4	2017	>0 - 1	>100 - 1000	>0 - 1
		2018	>0 - 1	>100 - 1000	>0 - 1
		Change	>0 - 1	>10 - 100	>0 - 1
		Change	0.0%	22.8%	0.0%
Isopropyl Alcohol	67-63-0	2017	>0 - 1	>1 - 10	>0 - 1
		2018	>0 - 1	>1 - 10	>0 - 1
		Change	>0 - 1	>0 - 1	>0 - 1
		Change	0.0%	9.9%	0.0%
Manganese (and its compounds)	NA - 09	2017	>10 - 100	>0 - 1	>10 - 100
		2018	>10 - 100	>0 - 1	>10 - 100
		Change	>1 - 10	>0 - 1	>1 - 10
		Change	-7.4%	0.0%	-4.3%
Methanol	67-56-1	2017	>1000 - 10000	>1000 - 10000	>0 - 1
		2018	>1000 - 10000	>1000 - 10000	>0 - 1
		Change	>0 - 1	>100 - 1000	>0 - 1
		Change	0.0%	13.4%	0.0%
Methyl Ethyl Ketone	78-93-3	2017	>0 - 1	>10 - 100	>0 - 1
		2018	>0 - 1	>10 - 100	>0 - 1
		Change	>0 - 1	>1 - 10	>0 - 1
		Change	0.0%	10.2%	0.0%
Methyl Isobutyl Ketone	108-10-1	2017	>0 - 1	>1 - 10	>0 - 1
		2018	>0 - 1	>1 - 10	>0 - 1
		Change	>0 - 1	>0 - 1	>0 - 1
		Change	0.0%	8.0%	0.0%
Nitrate Ion	NA - 17	2017	>10 - 100	>0 - 1	>0 - 1
		2018	>10 - 100	>0 - 1	>0 - 1
		Change	>0 - 1	>0 - 1	>0 - 1
		Change	0.0%	0.0%	0.0%

**Comparison of Reported Quantities**

Substance	CAS #	Year	Quantity Used	Quantity Created	Quantity Contained in Product
Phosphorus (total)	NA - 22	2017	>100 - 1000	>0 - 1	>0 - 1
		2018	>100 - 1000	>0 - 1	>0 - 1
		Change	>1 - 10	>0 - 1	>0 - 1
		Change	-2.7%	0.0%	0.0%
Sulphuric acid	7664-93-9	2017	>10000 - 100000	>1 - 10	>0 - 1
		2018	>10000 - 100000	>1 - 10	>0 - 1
		Change	>0 - 1	>0 - 1	>0 - 1
		Change	0.0%	4.8%	0.0%
Total Reduced Sulphur	NA - M14	2017	>0 - 1	>100 - 1000	>0 - 1
		2018	>0 - 1	>1000 - 10000	>0 - 1
		Change	>0 - 1	>100 - 1000	>0 - 1
		Change	0.0%	24.0%	0.0%
<b>NPRI Part 1B - Kilograms</b>					
Arsenic (and its compounds)	NA - 02	2017	>100 - 1000	>0 - 1	>10 - 100
		2018	>100 - 1000	>0 - 1	>10 - 100
		Change	>10 - 100	>0 - 1	>1 - 10
		Change	-6.5%	0.0%	-5.6%
Cadmium (and its compounds)	NA - 03	2017	>10 - 100	>0 - 1	>10 - 100
		2018	>10 - 100	>0 - 1	>10 - 100
		Change	>1 - 10	>0 - 1	>1 - 10
		Change	-6.7%	0.0%	-4.1%
Cobalt (and its compounds)	NA - 05	2017	>10 - 100	>0 - 1	>0 - 1
		2018	>10 - 100	>0 - 1	>0 - 1
		Change	>1 - 10	>0 - 1	>0 - 1
		Change	-29.2%	0.0%	0.0%
Hexavalent chromium compounds	NA - 19	2017	>0 - 1	>10 - 100	>0 - 1
		2018	>0 - 1	>10 - 100	>0 - 1
		Change	>0 - 1	>1 - 10	>0 - 1
		Change	0.0%	-6.3%	0.0%
Lead (and its compounds)	NA - 08	2017	>1000 - 10000	>0 - 1	>10 - 100
		2018	>1000 - 10000	>0 - 1	>10 - 100
		Change	>10 - 100	>0 - 1	>1 - 10
		Change	-7.2%	0.0%	-3.4%
Mercury (and its compounds)	NA - 10	2017	>10 - 100	>0 - 1	>1 - 10
		2018	>10 - 100	>0 - 1	>1 - 10
		Change	>1 - 10	>0 - 1	>0 - 1
		Change	-7.0%	0.0%	-3.8%
Selenium (and its compounds)	NA - 12	2017	>100 - 1000	>0 - 1	>100 - 1000
		2018	>100 - 1000	>0 - 1	>100 - 1000
		Change	>10 - 100	>0 - 1	>1 - 10
		Change	-7.4%	0.0%	-4.0%
<b>NPRI Part 2 - Kilograms</b>					
Acenaphthylene	208-96-8	2017	>0 - 1	>10 - 100	>0 - 1
		2018	>0 - 1	>10 - 100	>0 - 1
		Change	>0 - 1	>1 - 10	>0 - 1
		Change	0.0%	3.2%	0.0%
Fluoranthene	206-44-0	2017	>0 - 1	>10 - 100	>0 - 1
		2018	>0 - 1	>10 - 100	>0 - 1
		Change	>0 - 1	>1 - 10	>0 - 1
		Change	0.0%	3.5%	0.0%
Phenanthrene	85-01-8	2017	>0 - 1	>10 - 100	>0 - 1
		2018	>0 - 1	>100 - 1000	>0 - 1
		Change	>0 - 1	>1 - 10	>0 - 1
		Change	0.0%	4.0%	0.0%

**Comparison of Reported Quantities**

Substance	CAS #	Year	Quantity Used	Quantity Created	Quantity Contained in Product
Pyrene	129-00-0	2017	>0 - 1	>10 - 100	>0 - 1
		2018	>0 - 1	>10 - 100	>0 - 1
		Change	>0 - 1	>0 - 1	>0 - 1
		Change	0.0%	3.0%	0.0%
<b>NPRI Part 3 - Grams</b>					
1,2,3,4,6,7,8-Heptachlorodibenzofuran	67562-39-4	2017	>0 - 1	>0 - 1	>0 - 1
		2018	>0 - 1	>0 - 1	>0 - 1
		Change	>0 - 1	>0 - 1	>0 - 1
		Change	0.0%	5.2%	0.0%
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	35822-46-9	2017	>0 - 1	>0 - 1	>0 - 1
		2018	>0 - 1	>0 - 1	>0 - 1
		Change	>0 - 1	>0 - 1	>0 - 1
		Change	0.0%	2.1%	0.0%
1,2,3,4,7,8,9-Heptachlorodibenzofuran	55673-89-7	2017	>0 - 1	>1 - 10	>0 - 1
		2018	>0 - 1	>1 - 10	>0 - 1
		Change	>0 - 1	>0 - 1	>0 - 1
		Change	0.0%	0.0%	0.0%
1,2,3,4,7,8-Hexachlorodibenzofuran	70648-26-9	2017	>0 - 1	>0 - 1	>0 - 1
		2018	>0 - 1	>0 - 1	>0 - 1
		Change	>0 - 1	>0 - 1	>0 - 1
		Change	0.0%	5.2%	0.0%
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin	39227-28-6	2017	>0 - 1	>0 - 1	>0 - 1
		2018	>0 - 1	>0 - 1	>0 - 1
		Change	>0 - 1	>0 - 1	>0 - 1
		Change	0.0%	0.0%	0.0%
1,2,3,6,7,8-Hexachlorodibenzofuran	57117-44-9	2017	>0 - 1	>0 - 1	>0 - 1
		2018	>0 - 1	>0 - 1	>0 - 1
		Change	>0 - 1	>0 - 1	>0 - 1
		Change	0.0%	5.1%	0.0%
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin	57653-85-7	2017	>0 - 1	>0 - 1	>0 - 1
		2018	>0 - 1	>0 - 1	>0 - 1
		Change	>0 - 1	>0 - 1	>0 - 1
		Change	0.0%	5.1%	0.0%
1,2,3,7,8,9-Hexachlorodibenzofuran	72918-21-9	2017	>0 - 1	>0 - 1	>0 - 1
		2018	>0 - 1	>0 - 1	>0 - 1
		Change	>0 - 1	>0 - 1	>0 - 1
		Change	0.0%	0.0%	0.0%
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	19408-74-3	2017	>0 - 1	>0 - 1	>0 - 1
		2018	>0 - 1	>0 - 1	>0 - 1
		Change	>0 - 1	>0 - 1	>0 - 1
		Change	0.0%	5.2%	0.0%
1,2,3,7,8-Pentachlorodibenzofuran	57117-41-6	2017	>0 - 1	>0 - 1	>0 - 1
		2018	>0 - 1	>0 - 1	>0 - 1
		Change	>0 - 1	>0 - 1	>0 - 1
		Change	0.0%	5.1%	0.0%
1,2,3,7,8-Pentachlorodibenzo-p-dioxin	40321-76-4	2017	>0 - 1	>0 - 1	>0 - 1
		2018	>0 - 1	>0 - 1	>0 - 1
		Change	>0 - 1	>0 - 1	>0 - 1
		Change	0.0%	0.0%	0.0%
2,3,4,6,7,8-Hexachlorodibenzofuran	60851-34-5	2017	>0 - 1	>0 - 1	>0 - 1
		2018	>0 - 1	>0 - 1	>0 - 1
		Change	>0 - 1	>0 - 1	>0 - 1
		Change	0.0%	5.2%	0.0%

**Comparison of Reported Quantities**

Substance	CAS #	Year	Quantity Used	Quantity Created	Quantity Contained in Product
2,3,4,7,8-Pentachlorodibenzofuran	57117-31-4	2017	>0 - 1	>0 - 1	>0 - 1
		2018	>0 - 1	>0 - 1	>0 - 1
		Change	>0 - 1	>0 - 1	>0 - 1
		Change	0.0%	5.3%	0.0%
2,3,7,8-Tetrachlorodibenzofuran	51207-31-9	2017	>0 - 1	>0 - 1	>0 - 1
		2018	>0 - 1	>0 - 1	>0 - 1
		Change	>0 - 1	>0 - 1	>0 - 1
		Change	0.0%	4.0%	0.0%
2,3,7,8-Tetrachlorodibenzo-p-dioxin	1746-01-6	2017	>0 - 1	>0 - 1	>0 - 1
		2018	>0 - 1	>0 - 1	>0 - 1
		Change	>0 - 1	>0 - 1	>0 - 1
		Change	0.0%	0.0%	0.0%
Octachlorodibenzofuran	39001-02-0	2017	>0 - 1	>0 - 1	>0 - 1
		2018	>0 - 1	>0 - 1	>0 - 1
		Change	>0 - 1	>0 - 1	>0 - 1
		Change	0.0%	0.9%	0.0%
Octachlorodibenzo-p-dioxin	3268-87-9	2017	>0 - 1	>10 - 100	>0 - 1
		2018	>0 - 1	>10 - 100	>0 - 1
		Change	>0 - 1	>0 - 1	>0 - 1
		Change	0.0%	3.9%	0.0%
Hexachlorobenzene	118-74-1	2017	>0 - 1	>1 - 10	>0 - 1
		2018	>0 - 1	>1 - 10	>0 - 1
		Change	>0 - 1	>0 - 1	>0 - 1
		Change	0.0%	5.2%	0.0%
NPRI Part 4 - Metric Tonnes					
Carbon Monoxide	630-08-0	2017	>0 - 1	>1000 - 10000	>0 - 1
		2018	>0 - 1	>1000 - 10000	>0 - 1
		Change	>0 - 1	>10 - 100	>0 - 1
		Change	0.0%	-3.8%	0.0%
Nitrogen oxides (expressed as NO <sub>2</sub> )	11104-93-1	2017	>0 - 1	>1000 - 10000	>0 - 1
		2018	>0 - 1	>1000 - 10000	>0 - 1
		Change	>0 - 1	>100 - 1000	>0 - 1
		Change	0.0%	9.4%	0.0%
PM2.5 - Particulate Matter <= 2.5 Microns	NA - M10	2017	>0 - 1	>10000 - 100000	>0 - 1
		2018	>0 - 1	>10000 - 100000	>0 - 1
		Change	>0 - 1	>1000 - 10000	>0 - 1
		Change	0.0%	6.0%	0.0%
PM10 - Particulate Matter <= 10 Microns	NA - M09	2017	>0 - 1	>10000 - 100000	>0 - 1
		2018	>0 - 1	>10000 - 100000	>0 - 1
		Change	>0 - 1	>1000 - 10000	>0 - 1
		Change	0.0%	5.7%	0.0%
Sulphur dioxide	7446-09-5	2017	>0 - 1	>100 - 1000	>0 - 1
		2018	>0 - 1	>100 - 1000	>0 - 1
		Change	>0 - 1	>1 - 10	>0 - 1
		Change	0.0%	3.1%	0.0%
PM - Total Particulate Matter <= 100 Microns	NA - M08	2017	>0 - 1	>10000 - 100000	>0 - 1
		2018	>0 - 1	>10000 - 100000	>0 - 1
		Change	>0 - 1	>1000 - 10000	>0 - 1
		Change	0.0%	5.5%	0.0%
NPRI Part 5 - Metric Tonnes					
Ethyl Alcohol	64-17-5	2017	>0 - 1	>1 - 10	>0 - 1
		2018	>0 - 1	>1 - 10	>0 - 1
		Change	>0 - 1	>1 - 10	>0 - 1
		Change	0.0%	25.8%	0.0%

**Comparison of Reported Quantities**

Substance	CAS #	Year	Quantity Used	Quantity Created	Quantity Contained in Product
Isopropyl Alcohol	67-63-0	2017	>0 - 1	>1 - 10	>0 - 1
		2018	>0 - 1	>1 - 10	>0 - 1
		Change	>0 - 1	>0 - 1	>0 - 1
		Change	0.0%	9.9%	0.0%
D-Limonene	5989-27-5	2017	>1 - 10	>0 - 1	>0 - 1
		2018	>1 - 10	>0 - 1	>0 - 1
		Change	>0 - 1	>0 - 1	>0 - 1
		Change	-2.4%	0.0%	0.0%
Methyl Ethyl Ketone	78-93-3	2017	>0 - 1	>10 - 100	>0 - 1
		2018	>0 - 1	>10 - 100	>0 - 1
		Change	>0 - 1	>1 - 10	>0 - 1
		Change	0.0%	10.2%	0.0%
Alpha-Pinene	80-56-8	2017	>10 - 100	>0 - 1	>0 - 1
		2018	>10 - 100	>0 - 1	>0 - 1
		Change	>0 - 1	>0 - 1	>0 - 1
		Change	-0.7%	0.0%	0.0%
Beta-Pinene	127-91-3	2017	>1 - 10	>0 - 1	>0 - 1
		2018	>1 - 10	>0 - 1	>0 - 1
		Change	>0 - 1	>0 - 1	>0 - 1
		Change	1.0%	0.0%	0.0%
Methanol	67-56-1	2017	>1000 - 10000	>1000 - 10000	>0 - 1
		2018	>1000 - 10000	>1000 - 10000	>0 - 1
		Change	>0 - 1	>100 - 1000	>0 - 1
		Change	0.0%	13.4%	0.0%
Formaldehyde	50-00-0	2017	>0 - 1	>10 - 100	>0 - 1
		2018	>0 - 1	>10 - 100	>0 - 1
		Change	>0 - 1	>1 - 10	>0 - 1
		Change	0.0%	5.6%	0.0%